Amendments to the Claims:

Claims 1, 4, 15, 17, and 18 have been amended herein. Claim 19 is added herein. Please note that all claims currently pending and under consideration in the referenced application are shown below. Please enter these claims as amended. This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (Currently Amended) A system for applying a modifying composition to a substrate, comprising:

a processing chamber configured for passing ~~an elongated~~ a substrate therethrough, the processing chamber being further configured to accept a treatment mixture thereinto during movement of the ~~elongated~~ substrate therethrough, where the treatment mixture comprises a modifying composition in a carrier medium selected from the group consisting of a supercritical fluid, a near-critical fluid, a superheated fluid, a superheated liquid, and a liquefied gas, the processing chamber being configured to initiate a pressure drop in the treatment mixture such that the modifying composition is released from the carrier medium and applied to the ~~elongated~~ substrate within the processing chamber; and

an entry seal in communication with the processing chamber, the entry seal comprising at least one baffle having ~~a~~ an adjustable non-equidimensional aperture ~~of non-linear and non-rectangular shape therethrough~~ to accept ~~an elongated~~ a substrate of substantially matching, but slightly smaller ~~larger~~, cross-section.

2. (Previously presented) The system of claim 1, wherein the processing chamber comprises

a first region,

a second region, and

a constricted medial region between the first region and the second region and, in combination therewith, configured to initiate the pressure drop.

3. (Canceled).

4. (Currently Amended) The system of claim 1, further comprising an exit seal comprising at least one baffle having a non-equidimensional aperture ~~of non-linear and non-rectangular shape~~ therethrough to accept the ~~elongated~~ substrate of substantially matching, but slightly smaller ~~larger~~, cross-section.

5. (Previously presented) The system of claim 1, wherein the aperture of the at least one baffle is configured for passing therethrough a substrate selected from the group consisting of sheet-like substrates, U-shaped substrates, corrugated substrates, irregularly shaped substrates and angled substrates.

6. (Previously presented) The system of claim 5, wherein the aperture of the at least one baffle is configured for passing therethrough a sheet-like substrate selected from the group consisting of a plate, a ribbon, a sheet, a screen, and a plied material.

7. (Canceled).

8. (Previously presented) The system of claim 4, further comprising at least one expansion chamber disposed between the entry seal and the processing chamber, and at least one expansion chamber disposed between the exit seal and the processing chamber.

9. (Previously presented) The system of claim 8, wherein the entry seal and the exit seal comprise fluid filled chambers configured to maintain a pressure that is at least slightly greater than pressures in the expansion chambers.

10. (Previously presented) The system of claim 9, wherein the entry seal and the exit seal are each configured to maintain a chamber pressure that is at least slightly greater than the

adjacent expansion chambers by continuous inflow of a fluid.

11. (Previously presented) The system of claim 10, wherein the entry seal and the exit seal are each configured to maintain a chamber pressure that is at least slightly greater than pressures in the adjacent expansion chambers by continuous inflow of a fluid that is inert with respect to the treatment mixture.

12. (Previously presented) The system of claim 1, further comprising a pressure regulator configured for controlling pressure in the processing chamber.

13. (Previously presented) The system of claim 1, further comprising a temperature regulator configured for controlling temperature in the processing chamber.

14. (Previously presented) The system of claim 1, further comprising a substrate feed controller configured for controlling a speed at which the non-equidimensional substrate is passed through the system.

15. (Currently Amended) The system of claim 4, wherein the at least one baffle of each of the entry seal and the exit seal is adjustable to at least one of a different size and a different shape for accepting different ~~elongates~~ substrates therethrough.

16. (Canceled).

17. (Currently Amended) The system of claim 1, wherein the at least one baffle comprises an aperture configured for passing multiple~~, elongated,~~ equidimensional substrates therethrough simultaneously when arranged in an adjacent manner so as to present a non-equidimensional, non-linear, non-rectangular cross-section.

18. (Currently Amended) The system of claim 17, wherein the at least one baffle

comprises an aperture configured for passing multiple~~, elongated,~~ equidimensional substrates therethrough simultaneously when arranged in a side-by-side manner, a top-to-bottom manner, or encircled about each other.

19. (New) A system for applying a modifying composition to a substrate, comprising:

an entry seal, wherein the entry seal is adjustable to at least one of a different size and shape for accepting different substrates;

a processing chamber in communication with the entry seal and configured to allow movement of a substrate through the processing chamber, wherein the processing chamber comprises an entry baffle allowing entry of a substrate into the processing chamber, a constricted area for reducing the pressure of a treatment mixture introduced into the processing chamber, and an exit baffle allowing exit of a substrate from the processing chamber;

an injector in communication with the processing chamber and configured to introduce the treatment mixture into the processing chamber, wherein the treatment mixture comprises a modifying composition in a carrier medium selected from the group consisting of a supercritical fluid, a near-critical fluid, a superheated fluid, a superheated liquid, and a liquified gas;

an exit seal in communication with the processing chamber, wherein the exit seal is adjustable to at least one of a different size and shape for accepting different substrates; and

a substrate feed controller configured to control a speed at which a substrate is introduced into the entry seal.